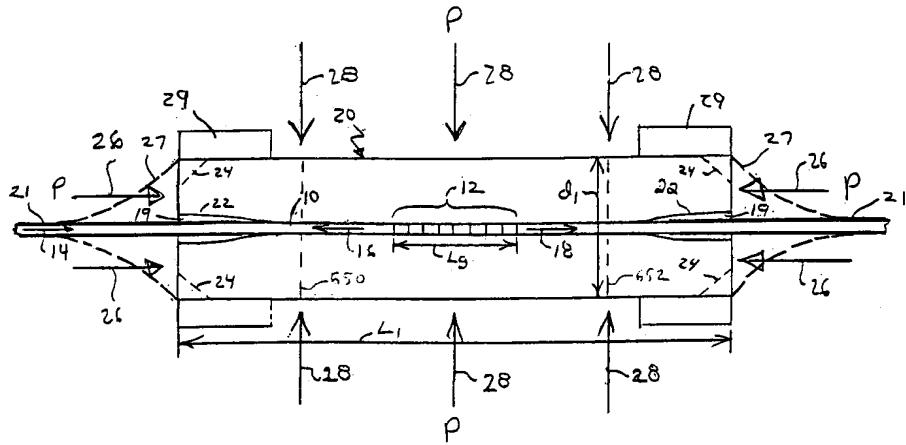


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(54) Title: BRAGG GRATING PRESSURE SENSOR



(57) Abstract

A fiber grating pressure sensor includes an optical sensing element (20, 600) which includes an optical fiber (10) having a Bragg grating (12) impressed therein which is encased within and fused to at least a portion of a glass capillary tube (20) and/or a large diameter waveguide grating (600) having a core and a wide cladding and which has an outer transverse dimension of at least 0.3 mm. Light (14) is incident on the grating (12) and light (16) is reflected from the grating (12) at a reflection wavelength λ_1 . The sensing element (20, 600) may be used by itself as a sensor or located within a housing (48, 60, 90, 270, 300). When external pressure P increases, the grating (12) is compressed and the reflection wavelength λ_1 changes.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

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Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 30926 A (UNIV SYDNEY ;HILL PETER (AU); ATKINS GRAHAM (AU); SCEATS MARK (AU)) 16 November 1995 (1995-11-16)	1-21,25, 26, 32-49, 53,54, 60,61
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Patent family members are listed in annex.

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International Application No

PCT/US 99/28868

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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